BROADBAND CONCERNS IN DEEP EAST TEXAS

Deep East Texas Council of Governments & Economic Development District (DETCOG)

March 13, 2019

Concern: The FCC's current broadband coverage map — In our region, the map shows broadband coverage where there is none. This is not just in a few isolated places, but a vast portion of our region. We are very concerned that grant funding should not be connected to this inaccurate data. As part of our regional study, we are currently conducting a speed test survey throughout our region to gather more accurate data and demonstrate the true state of broadband in Deep East Texas.

Concern: Connectivity services for rural communities facing a 'copper sunset' – Many of our communities are only serviced by copper/dial-up services without fiber/cable/cellular as an alternative.

- A prioritized program (e.g. incentivize building of fiber or cellular infrastructure) targeting 'copper-only' areas is important to Deep East Texas and Rural America.
- Given that rural areas have specific connectivity needs (such as long propagation requirements), the FCC should consider preferential allocation of wireless spectrum for rural regions to support critical infrastructure needs to facilitate newer technologies such as Fixed Wireless Access (FWA).

Concern: 5G for rural areas – 5G is the next wave of cellular innovation that will happen across most of America. 4G/LTE connectivity remains sparse and sporadic in Deep East Texas. While building 5G on top of existing 4G assets will provide better service to those who can get it, it will not expand the coverage area into the vast parts of our region that currently have no coverage. Note – it is possible 5G connectivity could be worse given the spectrum allocated for 5G typically reside in higher frequencies. This could result in smaller/less coverage if the service provider does not build out (or 'densify') additional cell sites.

A plan should be developed to incentivize wireless carriers and ISPs to buildout rural
areas beyond what is happening today. It is critical for funding to be designed to
address this -- otherwise, more and more will be invested to provide better service to
those people who already have service, and the many areas that have no service
(including most of Deep East Texas) will continue to have nothing.

Concern: Lack of broadband impacts public safety – Poor data coverage compromises the safety of the residents of our region, as well as law enforcement and first responders. Officers and emergency responders must sometimes respond to dangerous situations without the ability to communicate with dispatchers and other responders.

Concern: Most students in our region have no broadband service at home — There are 51 rural school districts in our 12-county region. Most of them have good internet access at their campuses because of the federal E-Rate program which subsidizes 80 percent of the cost. (A typical school district is charged about \$10,000 per month for service and E-Rate pays 80



percent of that.) However, while there is good coverage at the school facilities, most students have no broadband service at home.

- To make a real impact and allow the educational system to take full advantage of today's technology, we must get broadband out to the homes where the students live. Every school superintendent we have talked to in our region estimated that at least half of their students have no service at home. One superintendent estimated that 95 percent of their students have no broadband at home.
- Our school superintendents estimate that 30 percent of their students live within five miles of the school. We believe it would be easy and relatively inexpensive to push out fiber to these students if the existing fiber infrastructure could be utilized.

Concern: Lack of redundancy is a problem in areas of Deep East Texas that have broadband service — In talking with emergency service providers, healthcare providers, and businesses in our region, many report no broadband service in all or part of their service area. Some have service from a single source but report recurring problems with service interruptions due to cable cuts and other issues. When the service goes down, it can take hours or even multiple days to restore it because there is no "loop" and no redundancy. To ensure reliable service:

- Every area should be supported by a redundant fiber loop.
- Every broadband user should have access to service from multiple sources.

Concern: No connectivity poses public health and sanitation concerns — Many think lack of connectivity just means no data and no communication. We heard from rural water utilities that no connectivity also poses sanitation and healthcare concerns.

 Rural water and sewer services have limited ability to monitor waterways and pipes. Cracks or leaks in pipes used for waste management can go undetected until the next scheduled routine inspections or complaints from residents and businesses.

Concern: Many think lack of connectivity only impacts technology-oriented jobs (e.g. software development). But in Deep East Texas it has a direct impact to general workforce participation, particularly for women and people with disabilities

- The largest employment sector in the DETCOG region is the timber/logging/forestry industry. These are typically male-oriented positions given the physical requirements and tradition.
- The spouses of the timber/logging workers will typically search for service-type jobs, but these are limited. Without broadband, the alternative options commonly found in urban areas (e.g. call center jobs, administrative functions, entrepreneurial and homebased businesses like Etsy shops, etc.) are unable to exist in our region.
- Theoretically this could mean 30% 50% of working age (18–65) adults cannot contribute to the workforce due to lack of broadband.

Concern: FCC data sets rely on Census data which focuses on actual residents. This will not capture weekend/seasonal/holiday specific population changes — US Census Bureau numbers miss that fact that during bass fishing season there are routinely 40,000 to 50,000 (or more)



people visiting daily for fishing tournaments and competitions. Our region's population swells every weekend as residents of Houston and other urban areas "come out to the country" for the weekend. There are many part-time weekend residents in every county of Deep East Texas that do not appear in our local census counts.

Concern: The "fortunate" Deep East Texans who have access to broadband pay more for less. We compared the cost of residential internet service in Deep East Texas to the cost in the North Dallas-Fort Worth Metroplex as a reference baseline.

- For fiber, DETCOG households on average¹ pay 430 percent more per megabit of speed
- For cable, DETCOG households on average¹ pay 390 percent more per megabit of speed.

¹ Based on advertised price plans documented 2019 February